

On May 29<sup>th</sup>, 2008 the Vermont Governor signed the following.

S.226

**AN ACT RELATING TO REQUIRING THE INSTALLATION OF  
PHOTOELECTRIC-ONLY-TYPE SMOKE DETECTORS**

It is hereby enacted by the General Assembly of the State of Vermont:

Sec. 1. FINDINGS; INTENT

(a) The general assembly finds:

(1) Public safety experts recognize that smoke detectors serve as a lifesaving early-warning device in residential properties, and thousands of individuals can attest that detectors have saved their lives.

(2) The general assembly has concurred with these public safety experts that smoke detectors belong in Vermonters' homes and has enacted chapter 77 of Title 9, requiring the installation of smoke detectors in newly constructed single-family homes and at the time of the sale or exchange of a single-family home.

(3) **Despite the acknowledged benefits of smoke detectors, the Boston Fire Department has conducted carefully developed and supervised research that confirms that smoke detectors based only on the ionization technology will not necessarily save as many lives as other types of smoke alarm technology that are similarly priced.**

(4) **The Boston Fire Department research documented that when confronted with a smoldering fire, a smoke detector using only ionization technology responds on average 30 minutes after photoelectric technology and often not until debilitating levels of smoke exist.**

(5) The ionization-only smoke detectors also tend to set off excessive nuisance alarms, two-to-eight times more often than photoelectric detectors, causing them to be disabled.

(6) **The Boston Fire Department research documented that the vast majority of homes in Massachusetts is equipped with smoke detectors that use only ionization technology, and that 50 percent of the fatal fires in that state occur in buildings with working smoke detectors.**

(7) Since 1990, the state of Massachusetts has acknowledged the deficiencies of ionization-only smoke detectors by requiring that smoke detectors located near kitchens and bathrooms employ only photoelectric technology.

(8) **Due to the extensive research that the Boston Fire Department developed, the city of Boston has petitioned the state legislature for the authority to place new severe restrictions on the use of ionization-only smoke detectors.**

(9) Photoelectric-type smoke detectors are significantly more effective in providing earlier detection and warning than ionization-type smoke detectors in smoldering fires.

(10) Photoelectric-type smoke detectors provide earlier detection and warning than ionization-type smoke detectors in smoldering fires by tens of minutes. Ionization-type smoke detectors provide earlier detection and warning than photoelectric-type smoke

detectors in flaming fires by seconds or tens of seconds. Therefore, although this act requires photoelectric-only-type smoke detectors for the reasons set forth in these findings, the general assembly does not discourage the use of either battery operated/powerd ionization type smoke detectors in addition to the photoelectric-only-type smoke detectors required by this act. In any event, combination smoke detection is not accepted in place of photoelectric-only-type detection.

(11) The tragic deaths of a mother and four children December 17, 2005 in Barre because of a smoldering fire prompted the Barre Fire Department to test the two kinds of smoke detectors and conclude that the tragedy could have been averted by the use of a photoelectric type.

(b) Therefore it is the intent of the general assembly to avoid these needless deaths by requiring the use of the photoelectric smoke detectors.

Sec. 2. 9 V.S.A. § 2882(a) and (b) are amended to read:

(a) A person who constructs a single-family dwelling shall install one or more photoelectric-only-type smoke detectors in the vicinity of any bedrooms and on each level of the dwelling, and one or more carbon monoxide detectors in the vicinity of any bedrooms in the dwelling in accordance with the manufacturer's instructions. In a dwelling provided with electrical power, detectors shall be powered by the electrical service in the building and by battery.

(b) Any single-family dwelling when transferred by sale or exchange shall contain ~~one or more~~ photoelectric-only-type smoke detectors in the vicinity of any bedrooms and on each level of the dwelling installed in accordance with the manufacturer's instructions and one or more carbon monoxide detectors ~~powered by the electrical service in the building or by battery, or by a combination of both, and~~ installed in accordance with the manufacturer's instructions. A single-family dwelling constructed before January 1, 1994 may contain smoke detectors powered by the electrical service in the building or by battery, or by a combination of both. In a single-family dwelling newly constructed after January 1, 1994 that is provided with electrical power, smoke detectors shall be powered by the electrical service in the building and by battery. In a single-family dwelling newly constructed after July 1, 2005 that is provided with electrical power, carbon monoxide detectors shall be powered by the electrical service in the building and by battery.

Sec. 3. 9 V.S.A. § 2883(a) and (b) are amended to read:

(a) The seller of a single-family dwelling, including one constructed for first occupancy, whether the transfer ~~be~~ is by sale or exchange, shall certify to the buyer at the closing of the transaction that the dwelling is provided with ~~one or more~~ photoelectric-only-type, smoke detectors and ~~one or more~~ carbon monoxide detectors in accordance with this chapter. This certification shall be signed and dated by the seller.

(b) If the buyer notifies the seller within ten days by certified mail from the date of conveyance of the dwelling that the dwelling lacks a any photoelectric-only-type, smoke

~~detector~~ detectors or a any carbon monoxide ~~detector~~ detectors or that ~~either~~ any detector is not operable, the seller shall comply with this chapter within ten days after notification.

Sec. 4. 20 V.S.A. § 2731(j) is added to read:

(j) Rules adopted under this section shall require that information, written, approved, and distributed by the commissioner, on the type, placement, and installation of photoelectric smoke detectors and carbon monoxide detectors be conspicuously posted in the retail sales area where the detectors are sold.

Sec. 5. EFFECTIVE DATE

(a) This act shall take effect upon passage.

(b) In Sec. 2 of this act, 9 V.S.A. § 2882(a) shall apply to persons newly constructing a single-family dwelling after **January 1, 2009**.

(c) Secs. 2(b) and 3 shall apply to transfers on or after **January 1, 2009**.

(d) The requirement in this act for the installation of "photoelectric-only-type" smoke detectors does not prohibit and does not discourage the additional use of separately powered ionization or photoelectric/ionization combination smoke detectors.